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Remarks

Claims 1, 3-10, 13-24, and 27-29 remain pending in the application. 2, 11, 12, 25 and 26 are canceled. Claims 1, 3, 13, 14 and 27 are amended.

Claim Objections

Claim 3 is amended to address the informality of containing "deflation" before the term "valve" and to correspond with the preamble of claim 1. Therefore, withdrawal of this objection is respectfully requested.

Claim Rejection 35 U.S.C. § 112

The Applicant believes the term "flange" is well understood in the art. Further, the use of the term "flange" is well supported by the specification. The Applicant feels there is no confusion between the Examiner and the Applicant's definition of the term "flange" and it is defined as item 25 in the drawings. Therefore, withdrawal of this rejection is respectfully requested.

Claim Rejections — 35 U.S.C. § 102 (McCombs, et al.)

The Office Action rejects claims 1-10, 13-24, and 27 under 35 U.S.C. § 102(e) as being anticipated by McCombs, et al., Gas By-Pass Valve, U.S. Patent 6,186,477 (Feb. 13, 2001). The Office Action asserts McCombs discloses a valve having a valve body of non-conformable material having a bore extending therethrough, the bore extends in the directions from the inlet port to the outlet port. The Office Action further asserts there is an upper inwardly extending flange (unnumbered but near reference numeral 24) whose bottom serves as a valve seat, a plunger extends through the bore and has an upper small diameter segment, a lower large diameter segment and a disk. It is asserted the portion is of

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smaller diameter than the disk and a biasing spring surrounds it; the upper portion has an annular groove of smaller diameter than the rest of the upper portion and holds a sealing ring; and the valve is covered by a resilient housing. Independent claims 1 and 14 are amended. Claims 3-10 and 12 depend from claim 1 and claims 14-24 and 27 and depend from claim 14. Therefore, withdrawal of this rejection is respectfully requested

Independent claims 1 and 14 in the Application are amended. Claims 1 and 14 claim, *inter alia*, "...a ring comprising a conformable material disposed between the frustoconical upper surface of the lower segment and the upper inwardly extending flange..." McComb fails to disclose an a ring comprising a conformable material disposed between the frustoconical upper surface of the lower segment and the upper inwardly extending flange. Since the Applicant's claimed invention contains at least one claim limitation not found in McComb, a ring comprising a conformable material disposed between the frustoconical upper surface of the lower segment and the upper inwardly extending flange, it is not anticipated by McComb. Therefore, withdrawal of this rejection is respectfully requested.

Claim Rejections - 35 U.S.C. § 102 (Crow)

The Office Action rejects claims 1, 2, 5, 7, 11, 14, 16, 19, 21 and 25 under 35 U.S.C. § 102(e) as being anticipated by Crow, High pressure micro valve, U.S. Patent 5,364,070 (Nov. 15, 1994). The Office Action asserts Crow discloses a valve having a valve body of non-conformable material having a bore extending therethrough, the bore extends in the direction of the inlet port and the outlet port. It further asserts there is an inwardly extending flange whose bottom serves as a valve seat, a plunger extends through the bore and has an upper small diameter segment, a lower large diameter segment and a disk; the upper portion has an annular groove of smaller diameter than the rest of the upper portion and holds a sealing ring; and the lower segment has a

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frustoconical surface which corresponds to the valve seat. Independent claims 1 and 14 are amended. Claims 5 and 7 depend from claim 1 and claims 16, 19, and 21 depend from claim 14. Claims 2, 11, and 25 are canceled. Therefore, withdrawal of this rejection is respectfully requested.

Claims 1 and 14 claim, *inter alia*, a plunger having a lower segment with a frustoconical upper surface. Through the Office Action's own admission on page 10, the lower segment in Crow does not disclose "a frustoconical lower segment." The frustoconical shape in Crow is located on what is considered to be the upper segment in this reference. Since Crow fails to disclose at least one limitation found in the Applicant's claimed invention, the Applicant's claimed invention is not anticipated by Crow. Therefore, withdrawal of this rejection is requested.

Claim Rejections - 35 U.S.C. § 102 (Jeory)

The Office Action rejects claims 1 and 5-12 under 35 U.S.C. § 102(e) as being anticipated by Jeory, Connectors and Valves, U.S. Patent 6,234,450 (May 22, 2001). Claim 1 is amended. Claims 6-10 depend from claim 1. Claims 11 and 12 are cancelled. Therefore, of this rejection is respectfully requested.

Claim 1 as amended claims, *inter alia*, "a ring comprising a conformable material disposed between the frustoconical upper surface of lower segment and the upper inwardly extending flange...." Jeory fails to a ring comprising a conformable material disposed between the frustoconical upper surface of lower segment and the upper inwardly extending flange. Since Jeory fails to disclose at least one limitation found in the applicant's claimed invention, the Applicant's claimed invention is not anticipated by Jeory. Therefore, withdrawal of this rejection is respectfully requested.

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The Applicant again respectfully asserts Jeory is non-enabling. The Applicant fully agrees with the Examiner that every patent is assumed valid. 35 U.S.C. §282 However, In determining that quantum of prior art disclosure which is necessary to declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains an 'enabling disclosure'... ." In re Hoeksema, 399 F.2d 269, 158 USPQ 596 (CCPA 1968). The Applicant respectfully requests the Examiner draw attention specifically to the O-ring seal (30) located at the base of the shoulder (26) of the valve member (24) that contacts the bore (20a). (Figure 1). The position of the O-ring seal (30) at the shoulder of the valve member occludes the flow of fluid between the upper bore (20b) and the lower bore (20a) because the O-ring seal (30) is in complete contact with the lower bore (20a) surface. Even when the valve member (24) is depressed, the O-ring still remains in contact with the lower bore (20a) surface. (There is no indication in Jeory the lower bore is tapered) The Applicant recognizes that the equi-spaced openings (35) allow fluid to enter the lower bore (20a). What the Applicant fails to recognize is how fluid flows from the lower bore (20a) to the upper bore (20b) if the O-ring seal (30) remains in constant contact with the lower bore (20a) surface even when the valve member is depressed (24). For these reasons, the Applicant respectfully believes Jeory is not enabled and should not be used as a reference under 35 U.S.C. §102.

Claim Rejections – 35 U.S.C. § 102 ('111)

The Office Action rejects claims 1-10, 14, 15, 17-24 and 27-29 under 35 U.S.C. § 102(b) as being anticipated by German reference DE 31 48 111. Independent claims 1 and 14 are amended to claim, *inter alia*, "...a frustoconical upper surface..." German reference '111 fails to disclose a "frustoconical upper surface." Therefore, since German reference '111 fails to disclose at least

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one claim limitation found in the Applicant's claimed invention, the Applicant's claimed invention is not anticipated by '111. As a result, withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 102 (Lederer)

The Office Action rejects claims 1, 3-10, 14, 18-24 and 28-29 under 35 U.S.C. § 102(b) as being anticipated by French reference FR 2542983, Lederer et al. Independent claims 1 and 14 are amended to claim, *inter alia*, "a ring comprising a conformable material disposed between the frustoconical upper surface of the lower segment and the upper inwardly extending flange ..." Lederer fails to disclose "a ring comprising a conformable material disposed between the frustoconical upper surface of the lower segment and the upper inwardly extending flange." Since Lederer fails to disclose at least one claim limitation found in the Applicant's claimed invention, the Applicant's claimed invention is not anticipated by Lederer. Therefore, withdrawal of this application is respectfully requested.

Claim Rejections – 35 U.S.C. § 103

The Office Action rejects claim 1 as obvious over Lederer in view of Jeory. As discussed *supra*, Lederer and Jeory each fails to disclose "a ring comprising a conformable material disposed between the frustoconical upper surface of the lower segment and the upper inwardly extending flange." Since Lederer and Jeory each fails to disclose at least one common limitation found in the Applicant's claimed invention, it follows their combination also fails to disclose this common limitation. Since the combination of Lederer and Jeory fails to disclose "a ring comprising a conformable material disposed between the frustoconical upper surface of the lower segment and the upper inwardly extending flange" the Applicant's claimed invention is not obvious. Therefore, withdrawal of this rejection is respectfully requested.

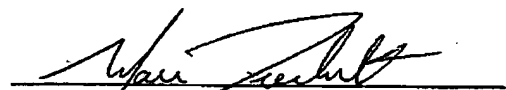
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Conclusion

This response has addressed all of the Examiner's grounds for rejection. The rejections based on prior art have been traversed. Reconsideration of the rejections and allowance of the claims is requested.

Date: June 7, 2005

By:


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